

MICROFINANCE AND ENTERPRISES – CASE OF ALBANIA

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Abstract

Small and micro entrepreneurs are often considered as a risky client group for banks, because they lack collateral or the capacity to convince banks that they are able to get and repay a business loan. The costs of processing small loans and the risks involved in lending to micro businesses make financial institutions hesitant to develop services for small and micro entrepreneurs.

Few entrepreneurs have or can rise from family and friends, but even established businesses often need to raise more finance than can be provided by retained earnings.

This paper aims to bring evidences to analyze how and to what the microfinance services in Albania has affected the entrepreneurial activity and how these entrepreneurial companies can benefit by using it. In order to do so, we focus on different aspects of microfinance impact to firms credited by MFIs in Albania.

The methodology combined the application of both quantitative and qualitative tools including questionnaire on different indicators addressed to beneficiaries. Qualitative information was collected through Focus Group Interviews and Semi-structured interviews to understand the situations that people face how they use and perceive microfinance, especially enterprises served by microfinance sector in Albania.

The paper will be organized in the way of bringing facts and figures about how the microfinance Institutions (*MFIs*) in Albania are supporting the small and medium enterprises with their services, considering the perspective of increasing the number of new small entrepreneurship practices as supposed to be supported by microfinance institutions in Albania.

Keywords: Microfinance, entrepreneurship, job creation, business diversity

1. Introduction:

During the last years, microfinance has gained growing recognition as an effective tool in improving the quality of life and living standards of very poor people. This recognition has given rise to a movement that now has a global outreach and has penetrated in the remote rural areas, besides slums and towns.

Microfinance projects extend small loans to poor people for their varied needs such as consumption, shelter, income generation and self-employment, etc.

In some cases, microfinance institutions offer a combination of several services to their clients, in addition to credit. These include linkages with savings and insurance avenues, skill development training and marketing network.

Microcredit programmes, thus, assume significance since they facilitate poverty reduction through promotion of sustainable livelihoods and bring about women empowerment through social and collective action at the grassroots. In addition, microfinance interventions lead to increased social interaction for poor women within their households and in the community, besides, greater mobility that increases their self-worth and self-assertion in the social circle.

A number of studies have been carried out on the impact of microfinance in Albania. *Kola* (2010)⁸ is focused on the microcredit contribution on social wellbeing in Albania. In this research, he brings facts/figures concerning to some issues: being client of microcredit companies bring positive changes in the living standards of microcredit program participants and broadly in their communities; being Microfinance Institutions client is associated with greater acquisition of land relative to non-clients, which can be taken as significant evidence of positive impact; he has find there is strong evidence of positive impact on the multiple dimensions of household income and enterprise performance.

Kola and *Korsita* (2010)⁹ are more interested about effects on social and economic development. The results of their Quantitative Impact Survey illustrate the considerable impact of microfinance on enabling access to micro financial services to the low income people. There is strongly evidenced that the proof of positive impact of microfinance products on income is in close relationship with the broader macro-economic environmental indicators of Albania.

⁸ Kola Forcim, "Microcredit contribution on social wellbeing", "LAPLAMBERT Academic Publishing", ISBN-13: 978-3843354110, Germany, 15 September 2010.

⁹ Kola Forcim, Korsita Bajram, "Microcredit role in the sustainable development and social wellbeing" co-author, published: The first International Scientific Conference of the Social Work programme at the University of Mostar, Bosnia and Herzegovina, October 2010.

*Kola, Korsita and Abazi (2011)*¹⁰ underline the positive economic and social effect on entrepreneurial activities. Some other articles focused on the mechanism by which poverty is reduced, or on the ability of microfinance to reach the poor and vulnerable.

As according to the data provided by MIX-Market, the sum of Gross Loan Portfolio of all MFIs in Albania is about USD 150 million in 2011, with an increase during the years 2005 – 2009, and characterized by stagnation after 2010, as shown in the chart below.

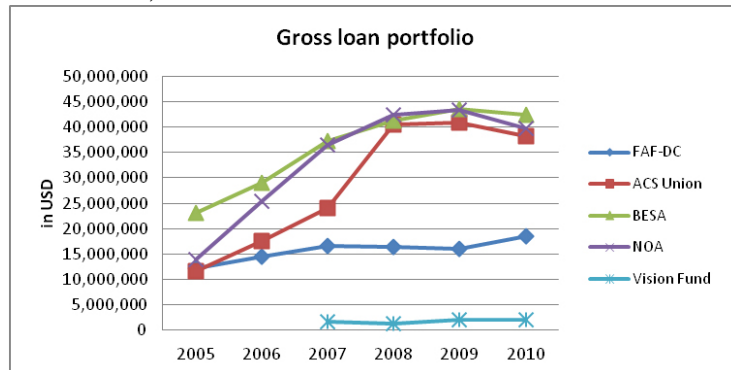


Chart 1. Gross loan portfolio of Albanian MFIs¹¹

In Albania, there are five main microfinance institution; *FAF-DC*, *ACS Union*, *BESA*, *NOA*, and *Vision Fund*, and many other small microfinance companies, adding the fact that there are an increasing number of banks providing some of microfinance services, as for example microcredit service, as there are Credins, ProCredit, etc.

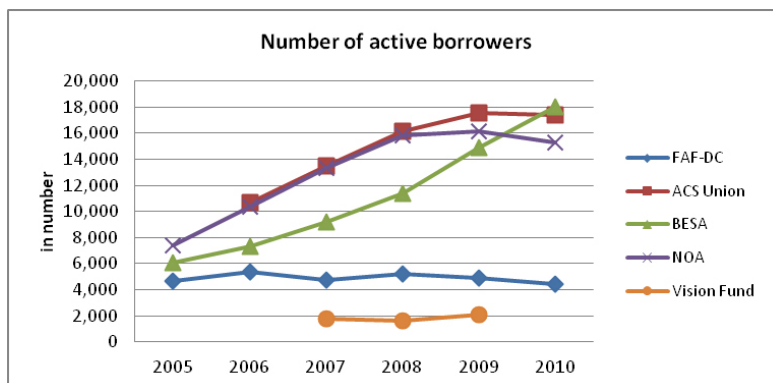


Chart 2. Number of active borrowers of Albanian MFIs

¹⁰ Kola Forcim, Korsita Bajram, Abazi Arjan, "Does microcredit creates social and economic development" co-author, published: The first International Scientific Conference, "Local Sustainable Development – challenges and opportunities", University of Pejë, Kosovë, June 2011.

¹¹ <http://www.mixmarket.org/mfi/country/Albania>, September 2012

Referring to the data provided by MIX-Market, we can see also an increase in the number of active borrowers of MFIs in Albania during the years 2005 – 2009, also after 2009 for some MFIs, as BESA microfinance institution (*chart 2*).

As in Albania, also abroad, there have been carried out a great number of studies on the impact of microfinance services considering many relevant aspects of our research.

Sebstad and Walsh (1991) also noted a positive impact of microcredit on microenterprise sales. *Mosley* (1996) conducted a study in Bolivia noted that respondents enterprise income increased by 91%, 39% borrowers employed after participation and 26% used loan for new technology – mostly sewing machines. *Kamal* (1999) measured the impact of ASA's (*Association for Social Advancement*) microcredit programs in Bangladesh, noted that 90.42% of the sampled respondents reported an increase in business capital after participation.

Copestake, Halotra and Johnson (2001) analyze the impact of microfinance on firms and individual wellbeing. *Copestake* et al focus on business performance and household income to establish a link between the availability of microfinance and overall wellbeing of the poor.

Latiffee (2003) in his study on Grameen Bank's microcredit clients in Bangladesh noted that the effect of Grameen loan on reducing unemployment rate among clients and on their households were impressive. He also mentioned that about 90% of borrowers reported an improvement in standard of living.

In 2005, *Elizabeth Dunn* conducted an impact study on 'Local Initiative (*Microfinance*) Project II' clients in Bosnia and Herzegovina. The findings of her study indicated that microcredit had a significant positive impact on household income, employment, business investment, business registration and post-war transition.

On other study conducted by *Rahman, Rafiq and Momen* (2009) mentioned that age, education and number of gainfully employed members has a significant positive effect on household income and asset.

Panda (2009) in his study conducted in India noted a significant increase in borrower's household income.

Experience and evidences shows that microcredit has a positive effect on the socio-economic conditions of the clients, their households and their microenterprise (*Mamun, Wahab and Malarvizhi*, 2010).

Almost all these studies seems to bring a very admirable view of microfinance impact, undertaking and providing an excellent picture of the quality of MFIs lending as well as some quantitative information related to employment creation and earnings of enterprises. MFIs activities are providing significant return to their clients meeting the objective of the

microfinance institutions both in terms of livelihood improvements, poverty reduction, job creation, import substitutions and technology transfer.

2. Methodology:

This research has been done in 2012 in order to assess, on a national scale, the development impact of MFI programmes in relation to different product designs and delivery systems in various parts of the country aiming to measure the effect of microfinance in entrepreneurial activities. Keeping in view the anticipated socio-economic impact of its microfinance programme, the study has been focused on how the micro lending practices has affected entrepreneurial activities, to assess also the impact at the beneficiary level specifically the impact on enterprise level.

2.1. Research Questions:

The primary objective of this research was to find out how micro lending practices affect entrepreneurial activity in Albania taking into consideration many business activities and measuring to them some attributes before and after taking the loan from any microfinance institution in Albania.

The key research questions addressed during the study include:

- ▽ Does microfinance contribute to enterprise growth?
- ▽ How does it leads clients to diversify economic activity?
- ▽ Does microfinance increases enterprise income?
- ▽ Does microfinance over a period of years increases enterprise assets?
- ▽ Does microfinance leads to changes in business practices associated with increased profitability?

These basic questions were translated into hypothesis linking input variables (*MFI services*) and moderating variables (enterprise client characteristics, programme characteristics and others) to ascertain the impact on entrepreneurial activity in Albania.

2.2. Sampling Design:

The sample was composed of the *treatment group* and the *control group*. The target population for the treatment group was “two-year clients”, and included both *current and ex-clients*. The distribution of current to ex-clients in the treatment group was roughly proportional to the percentage of clients who dropped out of the program over the relevant time period. The control group consisted of pipeline clients, or new program clients, who either have not received their first loan or have received their first loan but have yet finished their first loan cycle.

Following best practice for conducting surveys, the selection of the survey sample was done by first geographically clustering the clients. It is revealed that geographical differentiation (rural, urban and peri-urban) was the most appropriate form of clustering for this survey. The final sampled

numbers closely approximated the proportions of clients in terms of gender and percentage of borrowers and savers.

A total of 250 clients of Microfinance Institutions in Albania were interviewed for this survey which was conducted during September 2012.

The small group interview sessions were conducted with clients who were stratified and segmented only along gender lines to identify any differences in outcome by gender.

2.3. Data Collection and Analysis:

The study combined the application of both quantitative and qualitative tools including questionnaire on different indicators addressed to beneficiaries and other stakeholders. Qualitative information was collected through *Focus Group Interviews* and *Semi-structured interviews* to understand the situations that people face how they use and perceive microfinance, especially enterprises served by microfinance sector in Albania.

The quantitative data of sample enterprises were analyzed to find out percentages, averages and frequencies for various indicators. The results were subjected to longitudinal analysis for two types the *treatment group* and the *control group*, and the same were tested for statistical significance. The results of comparisons were studied/super-imposed to find out whether the behavior of a particular indicator supports the micro finance intervention as the cause of change.

The quantitative results were supplemented by qualitative observations obtained from *Focus Group Interviews* and *Semi-structured interviews*.

3. Testing of the Research Hypotheses:

Hypotheses for the enterprise level

Being client of microfinance services :

Hypothesis E₁ *contributes to enterprise growth.*

Hypothesis E₂ *leads clients to diversify economic activity.*

Hypothesis E₃ *increases enterprise income.*

Hypothesis E₄ *over a period of years increases enterprise assets.*

Hypothesis E₅ *leads to changes in business practices associated with increased profitability.*

With microfinance support, clients have either started new or expanded existing enterprises which not only provided better employment opportunities but also increased enterprise income.

It is widely accepted that for an enterprise being microfinance client leads to higher employee salaries, job creation, increase enterprise assets, and many other improvements. But let us evidence if this is true for microfinance clients in Albania.

3.1. Does microfinance contribute to enterprise growth?

▽ *The number of employees;*

The number of employees before and after taking a loan from MFIs has been recorded for 10 enterprises as in the table below:

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	2	1	8	0	2	3	4	2	5	2
After loan	3	3	10	3	4	3	5	5	8	2

Can the MFIs crediting be judged to be a success in job creation? Let's test at 5 per cent level of significance, using paired t-test as well as A-test.

Paired *t*-test is a way to test for comparing two related samples, involving small values of *n* that does not require the variances of the two populations to be equal, but the assumption that the two populations are normal must continue to apply.

For a paired *t*-test, it is necessary that the observations in the two samples be collected in the form of what is called matched pairs i.e., “each observation in the one sample must be paired with an observation in the other sample in such a manner that these observations are somehow “matched” or related, in an attempt to eliminate extraneous factors which are not of interest in test. Such a test is generally considered appropriate in a before-and-after-loan study.

Solution (a): Let the number of employees before loan be represented as *X* and the number of employees after loan as *Y* and then taking the null hypothesis that crediting does not bring any improvement in increasing number of employees, we can write:

$H_0: \mu_1 = \mu_2$, which is equivalent to test $H_0: \bar{D} = 0$

$H_a: \mu_1 < \mu_2$ (as we want to conclude that crediting has been a success).

Because of the matched pairs we use paired t-test and work out the test statistic ‘*t*’ as under:

$$t = \frac{\bar{D} - 0}{\sigma_{diff.}/\sqrt{n}}$$

To find the value of *t*, we first work out the mean and standard deviation of differences as under:

Business activities	The number of employees before loan X_i	The number of employees after loan Y_i	Difference $(D_i = X_i - Y_i)$	Difference squared D_i^2
1	2	3	-1	1
2	1	3	-2	4
3	8	10	-2	4

4	0	3	-3	9
5	2	4	-2	4
6	3	3	0	0
7	4	5	-1	1
8	2	5	-3	9
9	5	8	-3	9
10	2	2	0	0
n=10			$\Sigma D_i = -17$	$\Sigma D_i^2 = 41$

$$\bar{D} = \frac{\Sigma D_i}{n} = -\frac{17}{10} = -1.7$$

$$\sigma_{diff.} = \sqrt{\frac{\Sigma D_i^2 - (\bar{D})^2 * n}{n - 1}} = \sqrt{\frac{41 - (-1.7)^2 * 10}{10 - 1}} = 1.1595$$

$$t = \frac{-1.7 - 0}{1.1595/\sqrt{10}} = \frac{-1.7}{0.3667} = -4.6364$$

Degrees of freedom = (n – 1) = 10 – 1 = 9. As H_a is one-sided, we shall apply a one-tailed test (in the left tail because H_a is of less than type) for determining the rejection region at 5 per cent level of significance which come to as under, using table of t-distribution for 9 degrees of freedom:

R: $t < -1.833$

The observed value of t is – 4.6364 which fall in the rejection region and thus, we reject H_0 at 5 per cent level and conclude that crediting of MFIs has been successful in job creation, or the number of employees after the loan is significantly higher than the number of employees before the loan.

Solution (b): Using the Paired t-test calculations made with STATA we can confirm if there is a difference between number of employees before and after the loan or if the lending practice has been efficient or not in job creation or increasing employment.

Table 1. Hypotheses testing for comparing two related samples of employee number

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-1.7000	1.1595	0.3667	0.8904	[-2.5295; -0.8705]	-4.6364	9	0.0012	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the number of employees before and after the loan or that the lending practice has been efficient for enterprises served in job creation leading to increased employment.

Solution (c): Using A-test: Using A-test, we work out the test statistic for the observed data as under:

$$A = \frac{\sum D_i^2}{(\sum D_i)^2} = \frac{41}{(-17)^2} = 0.1419$$

Since H_a in the given problem is one-sided, we shall apply one-tailed test. Accordingly, at 5% level of significance the table value of A-statistic for $(n - 1)$ or $(10 - 1) = 9$ d.f. in the given case is 0.368 (as per table of A-statistic given in statistical appendix).

The computed value of A, being 0.1419, is less than this table value and as such A-statistic is significant. This means we should reject H_0 (alternately we should accept H_a) and should infer that the MFIs crediting practice has been successful in job creation.

▽ *The average salary of employees;*

Let's see the impact of lending practices of MFIs in average salary of employees using hypothesis testing for comparing two related samples;

Average salary of employees before and after the loan has been recorded for 10 enterprise activities as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can conclude if there is a difference between average salary of employees before and after the loan, or if the lending practice has been efficient or not in increasing employee salaries.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	26000	19000	24000	18000	20000	25500	25000	20000	24000	15000
After loan	26500	22500	28500	26000	25000	27000	28000	25000	26000	22000

Table 2. Hypotheses testing for comparing two related samples of employee salary

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 4000	2380.4761	752.7727	0.8084	[-5702; -2297]	- 5.3137	9	0.0005	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in average salary of employees before and after the loan or that the MFIs lending practice has been efficient in increasing employee salaries for enterprises served.

▽ *The number of suppliers;*

It has been recorded also the number of suppliers before and after the loan for 10 business activities credited by MFIs, as they are shown in the

table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the number of suppliers for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the number of suppliers of client business activities, contributing in this way in the value chain process.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	6	7	5	3	8	9	4	1	22	12
After loan	8	13	9	5	15	17	6	3	28	15

Table 3. Hypotheses testing for comparing two related samples of the number of suppliers

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 4.2000	2.3476	0.7424	0.9614	[-5.8794; -2.5206]	- 5.6576	9	0.0003	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the number of suppliers before and after the loan or that the lending process of MFIs has been successful in increasing the number of suppliers for enterprises served expanding so the levels of the value chain.

∇ *The average value of purchases for each supplier;*

Also trying to measure the effect of crediting, there have been recorded the average value of purchases from each supplier before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the average value of purchases from each supplier for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient in increasing the average value of purchases from each supplier of client business activities, contributing in this way in the value chain process, derived from the quantity of purchases from each supplier.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	20000	30000	900000	10000	15000	25000	140000	22000	50000	20000
After loan	21000	36000	950000	20000	20000	30000	150000	28000	80000	35000

Table 4. Hypotheses testing for comparing two related samples of the purchases for each supplier

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 13800.	15068.7314	4765.1513	0.9996	[- 24579.; - 3020.4]	- 2.8960	9	0.0177	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the average value of purchases for each supplier before and after the loan or that the lending process of MFIs has been efficient in increasing the average value of purchases for each supplier of the enterprises served.

∇ *The number of clients;*

On the aim of this research study there have been recorded also the number of clients before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the number of clients for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the number of clients of business activities, contributing in this way in the value chain process by increasing the number of clients.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	25	60	35	8	145	50	75	8	25	35
After loan	45	80	48	15	180	150	125	12	45	60

Table 5. Hypotheses testing for comparing two related samples of the number of clients

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 29.40	28.1670	8.9072	0.8887	[- 49.5494; -9.2506]	- 3.3007	9	0.0092	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the number of clients before and after the loan or that the lending process of MFIs has been efficient in increasing the number of clients of the enterprises served.

∇ *The average value of sales for each client;*

In the process of measuring the effect of crediting, there have been recorded the average value of sales for each client before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the average value of sales for each client for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the average value of sales for each client business activities, contributing in this way in the value chain process, derived from the quantity of sales to each client.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	1250	500	2000000	25000	15000	35000	2500	10500	120000	3500
After loan	1500	1000	3500000	30000	30000	60000	4500	15500	150000	4000

Table 6. Hypotheses testing for comparing two related samples of the average value of sales for each client

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-15832.5	471538.4403	149113.5476	0.9999	[-495643.2; 178993.2]	-1.0618	9	0.3160	Reject

As shown in the table above, we have to accept the null hypotheses, concluding that there is not a difference in the average value of sales for each client before and after the loan or that the lending process of MFIs has not been efficient in increasing the average value of sales for each client of the enterprises served.

∇ *The annual production / sales;*

As part of the data of this research study there have been recorded also the annual production / sales before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the annual production / sales for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the annual production / sales of business activities, contributing in this way in the value chain process.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	20000	250000	7500000	140000	300000	250000	5000000	45000	5000000	35000
After loan	45000	350000	1000000	180000	450000	550000	1000000	75000	1200000	75000

Table 7. Hypotheses testing for comparing two related samples of the annual production / sales

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-16085.00	2483154.419	785242.3723	0.9479	[-3384841.5; 167841.6]	-2.0484	9	0.0708	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the annual production / sales before and after the loan or that the lending process of MFIs has been successful in increasing the annual production / sales of enterprises served.

3.2. How does it lead clients to diversify economic activity?

➤ *The number of products / services;*

There have been also recorded the number of products and services before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the number of products and services for MFIs business clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the number of products and services of business activities.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	1	2	3	3	1	6	7	3	6	12
After loan	2	3	3	5	2	8	9	4	9	15

Table 8. Hypotheses testing for comparing two related samples of the number of products and services

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-1.6000	0.9661	0.3055	0.9888	[-2.2911; -0.9089]	-5.2372	9	0.0005	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the number of products and services before and after the loan or that the lending process of MFIs has been efficient in increasing the number of products and services of enterprises served.

➤ ***The number of districts offering the business activities;***

For the purpose of this research study there have been recorded also the number of districts offering the business activities before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the number of districts offering the business activities for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the number of districts offering the business activities of MFIs business clients, contributing in this way in the value chain process by increasing the number of districts offering the business activities expanding so the area of doing business for MFIs clients.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	1	1	3	1	1	2	1	2	5	1
After loan	2	1	5	1	1	4	1	2	7	1

Table 9. Hypotheses testing for comparing two related samples of the number of districts operating

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-0.7000	0.9487	0.3000	0.9548	[-1.3786; -0.0214]	-2.3333	9	0.0445	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the number of districts offering the business activities before and after the loan or that the lending process of MFIs has been efficient in increasing the number of districts offering the business activities of enterprises served, contributing in expanding the business area for the MFIs clients.

3.3. Does microfinance increases enterprise income?

◇ ***The average daily revenues;***

As part of the data of this research study there have been recorded also the average daily revenues before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the

Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the average daily revenues for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the average daily revenues of business activities, contributing in this way in increasing the business activities.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	10000	11000	25000	6000	2500	12500	25000	2500	12000	25000
After loan	18000	20000	35000	15000	4500	25000	45000	3500	15000	35000

Table 10. Hypotheses testing for comparing two related samples of the average daily revenues

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	d f	p-value	Alt Hypothesis
10	- 8450.00	5599.8512	1770.8284	0.9571	[- 12455.89 ; - 4444.10]	- 4.7718	9	0.0010	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the average daily revenues before and after the loan or that the lending process of MFIs has been successful in increasing the average daily revenues of the enterprises served.

♦ *The average monthly revenues;*

The data gathered for this research study have as a part also the average monthly revenues before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the average monthly revenues for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the average monthly revenues of business activities, contributing in this way in increasing the business activities.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	250000	285000	750000	22000	60000	35000	750000	85000	350000	50000
After loan	320000	350000	950000	44000	80000	75000	1000000	100000	450000	75000

Table 11. Hypotheses testing for comparing two related samples of the average monthly revenues

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 80700.00	81536.6993	25784.1683	0.9988	[- 139027.8; -22372.1]	- 3.1298	9	0.0121	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the average monthly revenues before and after the loan or that the lending process of MFIs has been successful in increasing the average monthly revenues of enterprises served.

♦ **The average annual revenues;**

There has been also recorded the average annual revenues before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the average annual revenues for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the average annual revenues of business activities, contributing in this way in increasing the business activities.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	3250000	3500000	9000000	350000	950000	550000	9500000	950000	3850000	500000
After loan	3700000	4500000	12000000	550000	1250000	650000	12500000	1250000	4500000	750000

Table 12. Hypotheses testing for comparing two related samples of the average annual revenues

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 925000	1123548.4463	355297.2152	0.9983	[- 1728738; - 121261]	- 2.6035	9	0.0286	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the average annual revenues before

and after the loan or that the lending process of MFIs has been successful in increasing the average annual revenues of enterprises served.

3.4. Does microfinance over a period of years increases enterprise assets?

❖ *The total assets;*

On the aim of this research study there have been recorded also the total assets before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of the total assets for MFIs clients before and after taking the loan, or if the MFIs lending process has been efficient or not in increasing the total assets of business activities, contributing in this way in expanding the business activities.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	27500 00	40000 00	75000 00	20000 00	200000 00	65000 00	220000 00	150000 00	190000 00	30000 00
After loan	28000 00	65000 00	90000 00	60000 00	250000 00	95000 00	250000 00	160000 00	200000 00	35000 00

Table 13. Hypotheses testing for comparing two related samples of the total assets

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-215500.0	1609425.3633	508944.98	0.9834	[-3306313.5; -1003686.4]	-4.2342	9	0.0022	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the total assets before and after the loan or that the lending process of MFIs has been efficient in increasing the total assets of enterprises served.

There is also statistically significant difference between the treatment and control groups in the proportion of members acquiring enterprise assets over the last 12 months. This finding seems to be consistent with that on acquisition of assets and corroborates the fact that we find evidence that MFIs program participation is associated with increased enterprise asset acquisition.

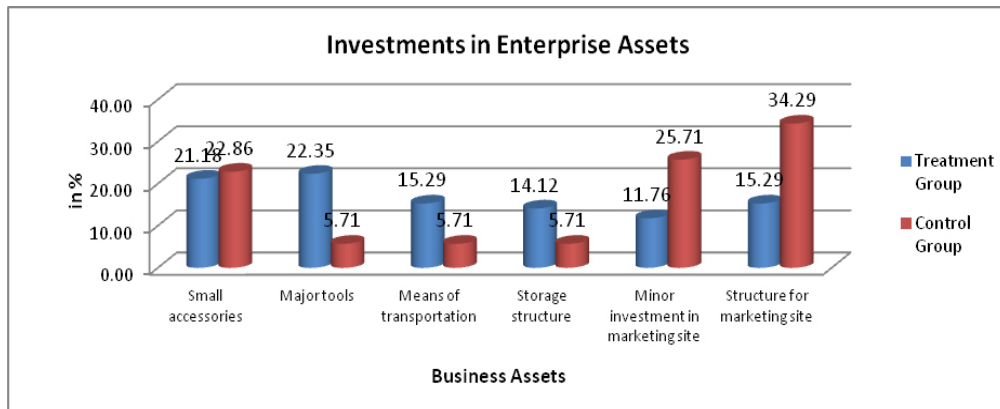


Chart 3. Change in Enterprise Assets over Last 12 Months - Treatment vs. Control Group

From the data, we see that “small accessories”, “major tools” and “means of transportations” have been brought more by the treatment group than by the control group, as shows the figures; (23.18% vs. 22.86%), (22.35% vs. 5.71%) and 15.29% vs. 5.71%).

3.5. Does microfinance leads to changes in business practices associated with increased profitability?

The profit amount;

For the aim of this study it has been recorded also the profit amount before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of profit amount before and after the loan or if the MFIs lending process has been efficient or not in increasing profit amount.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	35000	45000	850000	75000	65000	85000	95000	35000	75000	35000
After loan	60000	65000	100000	10000	85000	15000	12500	50000	85000	50000

Table 14. Hypotheses testing for comparing two related samples of profit amount

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	-78000	67626.42	21385.3532	0.9922	[-126377; -29622]	-3.6474	9	0.0053	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the profit amount before and after the loan or that the lending process of MFIs has been efficient in increasing profit amount of the enterprises served.

The data provided indicate a strong relationship between being MFIs clients and the change in enterprise profits over the last 12 months. The respondents compared between treatment groups vs. control group answered “increased” as figures are (46.00% vs. 11.00%). Those who answered “increased greatly” were (43.00% vs. 6.00%). Also we see the difference of the answers for “decrease” (1.00% vs. 31.00%).

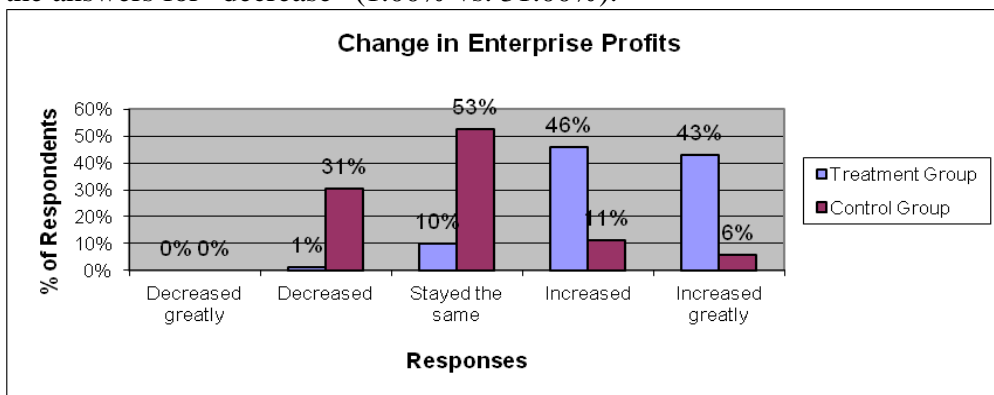


Chart 4. Change in Enterprise Profits over Last 12 Months - Treatment vs. Control Group

Among those reporting an increase in business profits over the last 12 months there is difference between the treatment and control groups, because the evidence points to relationship between being MFIs client and enterprise performance.

✚ **The profit margin;**

For the purpose of this study there has been recorded also the profit margin before and after the loan for 10 business activities credited by MFIs, as they are shown in the table below; Using the Paired *t*-test calculations made with STATA we can test the hypotheses for comparing two related samples of profit margin before and after the loan, or if the MFIs lending process has been efficient or not in increasing profit margin.

Business activities	1	2	3	4	5	6	7	8	9	10
Before loan	13,5	14,0	10,0	9,5	18,5	13,0	25,0	32,0	14,0	25,0
After loan	16,0	17,5	15,5	12,5	20,5	18,0	29,0	38,0	16,0	35,0

Table 15. Hypotheses testing for comparing two related samples of profit margin

Paired T-Test of mean difference = 0 versus not = 0									
Alternative hypothesis: true mean of differences is not equal to 0									
N	Mean	StDev	SE Mean	Corr	95% Conf Interval	t	df	p-value	Alt Hypothesis
10	- 4.3500	2.4387	0.7712	0.9709	[- 6.0945; - 2.6055]	- 5.6407	9	0.0003	Accept

As shown in the table above, we have to reject the null hypotheses, concluding that there is a difference in the profit margin before and after the loan or that the lending process of MFIs has been efficient in increasing profit margin of enterprises served.

4. Conclusions

Based on the survey and observation results we can conclude that lending practices have a positive effect on entrepreneurial activities in increasing employee salaries, in job creation or generating employment, in increasing profit margin of enterprises served as shown by the cases and models analyzed in the above text.

The research seems to bring a very admirable view of microfinance impact, undertaking and providing an excellent picture of the quality of MFIs lending as well as some quantitative information related to employment creation and earnings of enterprises. MFIs activities are providing significant return to their clients meeting the objective of the microfinance institutions both in terms of livelihood improvements, poverty reduction, job creation, import substitutions and technology transfer.

Besides credit, the poor need savings services to bridge income fluctuations and meet emergency needs. MFIs are not permitted to mobilize deposits, hence, are unable to offer savings services to their clients, so it is strongly recommended that MFIs may be permitted to mobilize savings at least from their own clients/members on the condition that they will follow prudential accounting norms. MFIs should offer interest on savings and savings be made withdraw able.

As provided by the evidences, the Albanian MFIs lending activities is a very commendable undertaking and provides an excellent picture of the quality of MFIs lending as well as some quantitative information related to employment creation and earnings of enterprises. MFI activities are providing significant return to their clients meeting the objective of the microfinance companies both in terms of livelihood improvements, poverty reduction, job creation, import substitutions and technology transfer.

MFIs are often pressurized to bring down interest rates to unreasonable levels in the name of service to the poor without provision of

any support. MFIs have to charge interest rates on loans to fully cover cost of funds, operational costs, loan loss provisions and reasonable margin of profit for servicing equity and building sustainability.

MFIs should follow a rational and transparent interest policy to avoid suspicions and encourage professionalism in the sector. MFIs may take steps like rationalizing the cost of funds by accessing various sources of funds, increasing operational efficiency, involving local small NGOs, etc.

Borrowers are often unaware of the effective cost of borrowing and complain about the high cost of loan and lack of transparency. MFIs should be transparent with respect to interest rate and other costs charged and effective cost of credit to the borrowers.

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